DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-019247 Address: 333 Burma Road **Date Inspected:** 14-Jan-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Lv Li Qing No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance(QA) Inspector Mr. Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. The QA Inspector observed and/or found the following:

BAY # 14

ULTRASONIC TESTING

ZPMC NWIT No: 08166

This QA Inspector performed Ultrasonic Testing (UT) of approximately 10% of the length previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an (UT) report on this date. The members are identified as OBG 13AE. The weld designations are as follows:

DP3108-001-133, 131, 129, 143, 145, 147, 151, 163, 161, 159, 165, 167, 169, 171, 173

DP3109-001-031, 026, 037, 042, 048, 053

DP3107-001-011, 063, 115, 086

ULTRASONIC TESTING

ZPMC NWIT No: 08167



WELDING INSPECTION REPORT

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This QA Inspector performed Ultrasonic Testing (UT) of approximately 10% of the length previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an (UT) report on this date. The members are identified as OBG 13AE. The weld designations are as follows:

SEG3007AU-079

This QA Inspector randomly observed the following work in progress.

OBG 14EAST

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 201087 performing the Shielded Metal Arc Welding process on weld 145 located at PCMK SEG3019BB. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2213-Tc-u4b-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 044824 performing the Flux Cored Arc Welding process on weld 164 located at PCMK SEG3019D. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2231-ESAB

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 070007 performing the Shielded Metal Arc Welding process on weld 040 located at PCMK SEG3019W. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2213-Tc-u4b-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 044830 performing the Flux Cored Arc Welding process on weld 167 located at PCMK SEG3019E-2. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2231-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066471 performing the Flux Cored Arc Welding process on weld 026 located at PCMK SEG3019K-1. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2231-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 068501 performing the Flux Cored Arc Welding process on weld 150 located at PCMK SEG3019E-2. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2231-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 217805 performing the Flux Cored Arc Welding process on weld 109 located at PCMK SEG3019AJ. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067764 performing the Shielded Metal Arc Welding process on weld 087 located at PCMK SEG3019Z. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2114-Tc-u4b-Fcm-1.

WELDING INSPECTION REPORT

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During the Quality Assurance (QA) random in-process observations of the fabrication of OBG 14 East in bay # 14, this Caltrans QA Inspector observed the Anchor Plate (AP3031) is observed to be erected/assembled in OBG lift 14 East prior to correction of its cope holes.

The AP3031 located in OBG lift 14 east between PP126 and 126.5, The cope hole observed did not grounded smooth, slag, undercut, underfill, overlap likes discontinuity observed. See attached photos for more detail. Incident report was issued.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.









Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

Inspected By:

Utekar, Shrikant

Quality Assurance Inspector

WELDING INSPECTION REPORT

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Reviewed By: QA Reviewer Patterson, Rodney